



Natalia Alward <alwardn@grafton-ma.gov>

## 41 Church & 14 West Streets - Brigati Village, LLC - Multi-Family Dwellings in RMF Zone

1 message

**ljmhutchins@gmail.com via Town of Grafton MA** <cmsmailer@civicplus.com>Sun, Apr 21, 2019 at 7:28 PM Reply-To: "ljmhutchins@gmail.com" <cmsmailer@civicplus.com>
To: planningdept@grafton-ma.gov

Planning Board Public Comment Form
Submitted from the Town of Grafton website on Sunday, April 21, 2019 - 7:28pm

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Submitted on Sunday, April 21, 2019 - 7:28pm Submitted by user: Anonymous Submitted values are: APR 2 2 2019

PLANNING BOARD GRAFTON, MA

Select a Project: 41 Church & 14 West Streets - Brigati Village, LLC -

Multi-Family Dwellings in RMF Zone

First Name: Linda Last Name: Hutchins

Email Address: ljmhutchins@gmail.com Street Address: 3 Spanish River Rd

City: Grafton

State: Massachusetts

Public Comment Disclaimer: I have read and understand the Public Comment

Disclaimer.
Comments:
Linda M. Hutchins
3 Spanish River Rd
Grafton, MA 01519

April 21, 2019

Mr. Robert Hassinger, Chairman Grafton Planning Board Town of Grafton Grafton Memorial Municipal Center 30 Providence Rd. Grafton, MA 01519

Subject: Public Comment
Proposed Brigati Village Development
41 Church St. and 41 West St.
SP-2019-2

Dear Mr. Hassinger and Planning Board:

I am writing to express my concerns and provide comments on the proposed Brigati Village development off of Church Street in Grafton. I am employed as an Environmental Protection Specialist for the Federal Emergency Management Agency (FEMA) Mitigation Division, but am commenting solely as a resident of Grafton. I am also a Professional Geologist and Certified Floodplain Manager. Prior to my employment with FEMA, I served as a Hydrologist for the Massachusetts Department of Conservation and Recreation,

and was a member of the State Hazard Mitigation Interagency Committee.

## Landslide Hazard

I request the Planning Board require a geotechnical evaluation of this plan before the project is permitted. Slope stability of the development's hillside adjacent to Church Street is my primary concern. This area is mapped as a High Slope and Very High Slope Terrain in the town's 2016 Hazard Mitigation Plan, and as such it poses a landslide hazard. The Town's plan considers High Slope Terrain from 15 to 22% slope, and Very High Slope Terrain greater than 25%. The section of the development that is planned to be cleared of vegetation and have stormwater detention basins has a slope of about 30% based on the design plans. A geotechnical evaluation of this design plan has not been presented and was not included with the stormwater management plan. Storage of water in Detention Basins 1 and 2 will cause increased hydrologic pressure on the soils and could cause their instability and failure. Although the design indicates some geotextile material will be placed on the ground surface in areas with slopes above 2:1, there has not been a geotechnical assessment of the slope stability with the proposed stormwater design. The surficial geotextiles and hydroseeding will not protect against hydrostatic slope failure.

The Massachusetts State Hazard Mitigation and Climate Change Adaptation Plan Section 4.1.3 indicates most Massachusetts landslides are caused by a combination of unfavorable geologic conditions, steep slopes, and/or excessive wetness leading to excess pore pressures in the subsurface. Landslides associated with slope saturation occur predominantly in areas with steep slopes underlain by glacial till or bedrock. It is estimated that one to three landslide events occur per year in the state, usually following two months of above-normal precipitation and during heavy rain events.

In my work with FEMA, I have seen slope failures in the types of conditions at the proposed development site. It is located on a dense glacial basal till drumlin, with slopes of 25%. The soil type (Paxton fine sandy loam) is described as containing slowly permeable dense till layers that perch seasonal water tables. Soil descriptions included in the stormwater management plan confirm this, showing ground water seeping into the holes at a depth around 5 feet, and the water table at 8.5 feet below ground during the month of August. The two proposed detention basins on the west side of the development will increase water pressure on the hillside while they are storing water, and serve to exfiltrate water into the hillside to dissipate runoff from the upper portion of the development. This would exacerbate the already risky high slope conditions. I echo Daniel Vellone's call for geotechnical boring data and further demand a complete engineering study be completed before this plan is approved. The nearby Bruce Hollow development was constructed on a similar hilltop and the steep side slopes have held, but no stormwater detention ponds were sited on the hillside and the vegetation was left in place. If the hillside slides, it could be disastrous to uphill and downhill residents. It would be very difficult and costly to repair or control. Please make every effort to prevent this outcome.

Resource Protection: Endangered Species Act

Initial stages of the site development sequence include tree cutting and removing stumps and vegetation. This could result in the loss of a lovely section of forested land that serves our environment well. The proposed development is adjacent to Grafton Land Trust protected land that dear friends of mine contributed to. A potential loss that could come with the clear cutting of this land is loss of habitat to the northern long-eared bat,

which is threatened throughout the northeast United States as a result of the white-nose syndrome. In the summer, the bats feed, roost and raise their young in forested areas. I recall seeing many bats out on summer nights on Church Street and South Street. The Endangered Species Act prohibits incidental "take" of the northern long-eared bat as a result of tree removal within 150 feet of a known maternity roost tree from June 1 to July 31. The applicant should contact the US Fish and Wildlife Service, and the Massachusetts Division of Fisheries & Wildlife's Natural Heritage and Endangered Species Program to prevent disturbance of these endangered species as the developer proposes tree removal from a large area. A field survey for northern long-eared bats would likely be useful, as would less clear-cutting of trees to protect the hillslope from failure.

## Other Considerations

I urge the Planning Board and all town agencies to carefully consider their review of this development for many reasons, including its location immediately adjacent to our community's beloved Grafton Center and Historic District. I share the concerns expressed in other comment letters regarding the following issues:

Traffic: The study plan seems to underestimate the traffic generation from the development. I wonder if the recent Grafton Common traffic re-design would accommodate the additional traffic that will be generated in this area. I can also attest to the line of traffic at the Common at the morning and evening commutes.

Pedestrian Safety on Church Street: As a former resident of Church Street, I can say I was fearful of walking on the street because of the poor line of sight caused by the steep windy road, combined with the lack of sidewalks on the lower end of the street. I'm not sure signs at the cross-walk will be adequate since cars coming up the hill will not be able to see them.

Churchill Condominium driveway access: I was a former owner and resident of 55 Church Street. I concur with Daniel Vellone's description of the hazardous icy conditions of the common driveway. The proposed development's drainage plan will likely exacerbate both stormwater runoff and ground water seepage onto that downhill abutting driveway and warrants further study.

Thank you for your careful consideration of these comments and your thorough review of this proposal.

Sincerely,

Linda Hutchins, P.G., CFM

CC: Grafton Conservation Commission
Daniel Vellone, 51 Church St, Grafton
Raymond Mead, Grafton Emergency Management Director